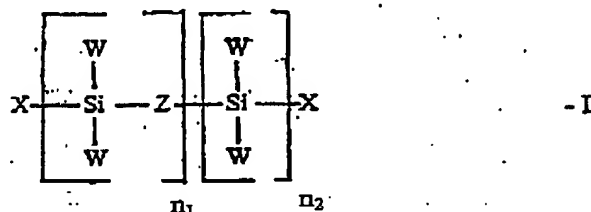


Application No. 09/762,765

3

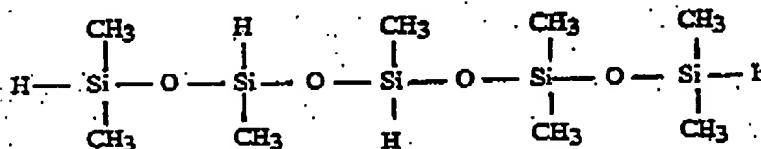
Amendments to the Claims:

1. (Previously amended) A branched copolymer of a polyolefin and a silicone polymer which is produced by melt phase reactive extrusion hydrosilylation.
2. (Original) The copolymer of claim 1 wherein said silicone polymer is a polysilane of the Formula I:



wherein X is an organic end group, W is an organic or inorganic group, with X and W being selected such that the polysilane contains at least two Si-H groups and sufficient to provide a branched structure, and n_1 and n_2 are the number of repeating groups in the chain.

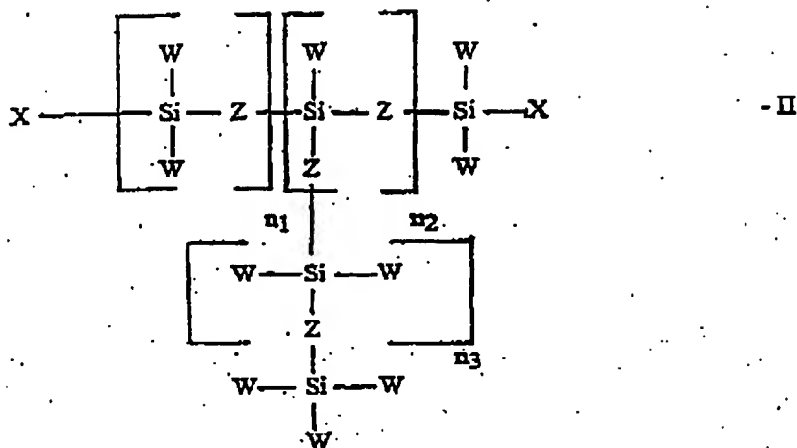
3. (Original) The copolymer of claim 2 wherein said polysilane of formula I is a polyhydrosiloxane of the formula:



Application No. 09/762,765

4

4. (Original) The copolymer of claim 1 wherein said silicone polymer is a polysilane of the Formula II:

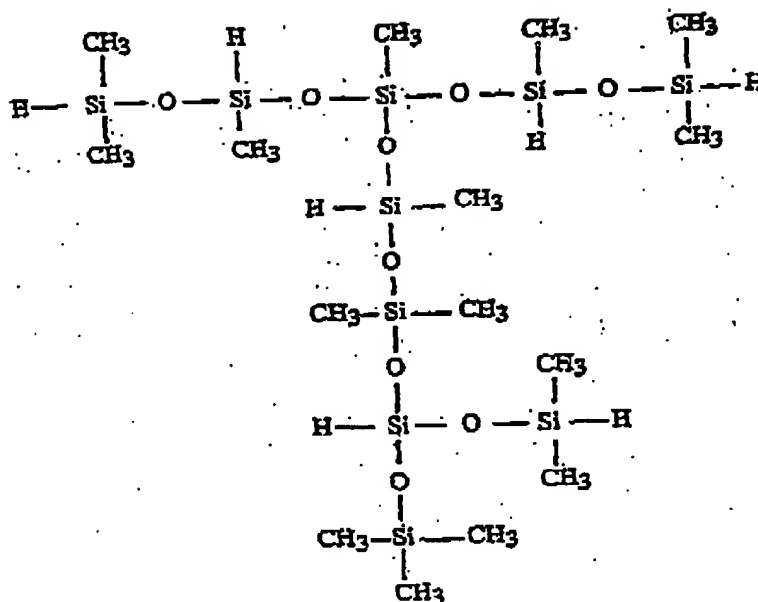


wherein X is an organic end group, W is an organic or inorganic group, with X and W being selected such that the polysilane contains at least two Si-H groups and sufficient to provide a branched structure, and n_1 , n_2 and n_3 are the number of repeating groups in the chain.

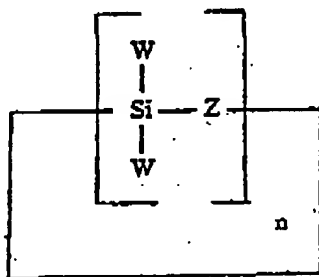
5. (Original) The copolymer of claim 4 wherein said polysilane of Formula II is a branched polyhydrosiloxane of the formula:

Application No. 09/762,765

5



6. (Original) The copolymer of claim 1 wherein said silane polymer is a polysilane of the formula III:



- III

wherein W is an organic or inorganic group selected such that the polysilane contains at least two Si-H groups and sufficient to provide a branched structure, and n is the number of repeating groups in the chain.

Application No. 09/762,765

7

13. (Currently amended) The copolymer of claim 12 wherein free Si-H groups are converted ~~connected~~ into a Si-OH group by a metal-catalyzed reaction with water and subsequently dehydrogenatively coupling to a second Si-H group.
14. (Original) The copolymer of claim 12 wherein Si-H groups are reacted by dehydrogenative coupling.
15. (Original) The copolymer of claim 8 which is coupled to metallic, glass, ceramic or other vitreous surface.
16. (Cancelled)
17. (Cancelled)
18. (Original) A process of forming a branched polypropylene, which comprises effecting melt phase hydrosilylation of a terminally-unsaturated polypropylene in the presence of a methylhydrosiloxane-dimethylsiloxane random copolymer (MDMS).
19. (Original) A process of forming a branched polypropylene, which comprises:
effecting hydrosilylation at a vinyl end of polypropylene with a trialkoxysilane to form a functionalized polymer, and
thereafter effecting post-reaction branching of the functionalized polymer by reacting Si-OR groups to form a Si-O-Si bridge.
20. (Previously added) The copolymer of claim 1 wherein said polyolefin is polypropylene.
21. (Previously added) A process of forming a branched copolymer, which comprises:
treating a polyolefin with peroxide to provide terminal unsaturation, and
reacting the terminally-unsaturated polyolefin with a silicone polymer containing at least two Si-H groups in a melt phase reactive extrusion hydrosilylation reaction.

Application No. 09/762,765

8

22. (Previously added) The process of claim 21 wherein said polyolefin is polypropylene.